

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

**Part I. Proposed Action Description**

1. Applicant/Contact name and address: William Applegate  
85 Applegate Ln  
Deer Lodge, MT 59722
2. Type of action: Applications to Change an Existing Irrigation Water Right No. 76G 30070623 (Water Right Claim No. 76G 90410-00)
3. Water source name: Cottonwood Creek
4. Location affected by project: Cottonwood Creek from the upper Applegate diversion in the NWSE of Section 1, Township 7 North, Range 9 West, Powell County to the confluence with the Clark Fork River in the NWSE of Section 33, Township 8 North, Range 9 West, Powell County.

1. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

Applicant proposes to temporarily change a portion of Cottonwood Creek water right claim 76G 90410 to instream flow for fisheries. Under the proposed change, the Applicant will replace an earthen ditch, referred to as the upper diversion or POD #1 located in the NWSE of Section 1, Township 7 North, Range 9 West, Powell County, with a 15-inch pipeline to convey water to 152 acres which will be irrigated by three center pivot systems in Sections 2 and 3, Township 7 North, Range 9 West. 24 acres in Sections 2 and 3 will be retired from irrigation. The Applicant will continue to flood irrigate 155 acres in Sections 2 and 3 from a ditch referred to as the lower diversion, or POD #2 located in the NWSE of Section 2, Township 7 North, Range 9 West, Powell County, until July 14 of each year, at which point irrigation of these acres will be discontinued for the remainder of the season. Water savings from the conversion to the pipeline, retirement of the 24 acres, and late season retirement of the 155 acres served by POD #2 will be protected as instream flow in Cottonwood Creek below the upper diversion to the confluence with the Clark Fork River. The protected flow rate will be 4.76 CFS.

5. Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)
  - Montana Natural Heritage Program (MTNHP)
  - USDA Web Soil Survey
  - Montana Department of Environmental Quality

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

#### **PHYSICAL ENVIRONMENT**

##### **WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

*Determination:* No impact.

The purpose of the proposed project is to increase the amount of water in Cottonwood Creek by reducing the amount diverted for irrigation.

**Water quality** - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

*Determination:* No impact.

The proposed project will result in more of the natural flow remaining in stream, therefore no negative impact to water quality is expected.

**Groundwater** - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination:* No impact.

The source of the water right proposed for change is surface water, and the proposed project will decrease the amount diverted from the source.

**DIVERSION WORKS** - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

*Determination:* No impact.

The proposed project will utilize a pipeline inlet installed in an existing headgate. No additional diversion construction is proposed.

##### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater,

*assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

*Determination: No impact.*

MTNHP identified 14 Species of Concern near the project area: Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi*), Bull Trout (*Salvelinus confluentus*), Long-billed Curlew (*Numenius americanus*), Little Brown Myotis (*Myotis lucifugus*), Great Blue Heron (*Ardea Herodias*), Bald Eagle (*Haliaeetus leucocephalus*), Bobolink (*Dolichonyx oryzivorus*), Lewis's Woodpecker (*Melanerpes lewis*), Golden Eagle (*Aquila chrysaetos*), Western Toad (*Anaxyrus boreas*), Northern Goshawk (*Accipiter gentilis*), Wolverine (*Gulo gulo*), Idaho Sedge (*Carex idahoensis*), Deer Indian Paintbrush (*Castilleja coccinea*).

The proposed project is expected to increase water availability and the only physical disturbance will be the installation of center pivot irrigation systems on land that is already cultivated, therefore no impact to the species listed above is expected.

**Wetlands** - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination: No impact.*

The project does not involve wetlands.

**Ponds** - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination: No impact.*

The project does not involve ponds.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

*Determination: No impact.*

Irrigation practices will remain within the existing irrigation footprint, and the irrigated area will be reduced under the proposed change. The proposed point of diversion utilizes an existing headgate.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

*Determination: No impact.*

Irrigation and/or disturbance of the existing place of use would be reduced under the proposal.

**AIR QUALITY** - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

*Determination:* No impact.

**HISTORICAL AND ARCHEOLOGICAL SITES** - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

*Determination:* N/A - The project is not located on State or Federal lands.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - Assess any other impacts on environmental resources of land, water and energy not already addressed.

*Determination:* No further impact identified.

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:* No impact.

The purpose of the proposed project is to increase flows in the source stream, which would provide a fisheries and recreational benefit to the area.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination:* No impact.

The proposed project area is located on private lands.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

*Determination:* No impact.

The proposed project will potentially increase the water quality in the source.

**PRIVATE PROPERTY** - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No x If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

**OTHER HUMAN ENVIRONMENTAL ISSUES** - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No impact.
- (b) Local and state tax base and tax revenues? No impact.
- (c) Existing land uses? No impact.
- (d) Quantity and distribution of employment? No impact.
- (e) Distribution and density of population and housing? No impact.
- (f) Demands for government services? No impact.
- (g) Industrial and commercial activity? No impact.
- (h) Utilities? No impact.
- (i) Transportation? No impact.
- (j) Safety? No impact.
- (k) Other appropriate social and economic circumstances? No impact.

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts None identified.

Cumulative Impacts None identified.

**3. *Describe any mitigation/stipulation measures:*** No mitigation or stipulations are necessary.

**4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** No human or environmental impacts exist as a result of the proposed change,

and the no action alternative results in less water left in-stream. Furthermore, the proposed change would be beneficial to fisheries in both sources.

### ***PART III. Conclusion***

1. ***Preferred Alternative*** No preferred alternatives identified.
2. ***Comments and Responses*** None at this time.
3. ***Finding:***  
*Yes\_\_\_ No\_x\_ Based on the significance criteria evaluated in this EA, is an EIS required?*

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:*

An Environmental Assessment is the appropriate level of analysis because no significant adverse impacts were identified for the proposed project.

*Name of person(s) responsible for preparation of EA:*

Russ Gates  
Hydrologist/Water Resource Specialist  
September 11, 2017